

Peak Emission Wavelength: 650nm

The 650nm Point Source Series is designed for applications requiring high accuracy and precision. Custom package solutions and sorting are available.

FEATURES

- > 3.5x2.2x1.24 Flat Top Ceramic SMT
- > Emitting Window Diameter Φ 150 μ m
- > High Reliability / High Output Power

APPLICATIONS

- > Optical Sensing / Optical Instruments
- > Linear & Rotary Encoder
- > Machine Vision / CCD
- > Optical Switches



Absolute Maximum Ratings (Ta=25°C)

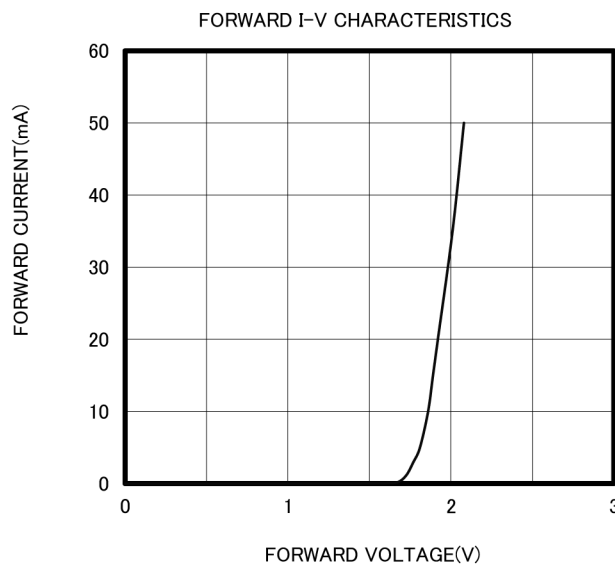
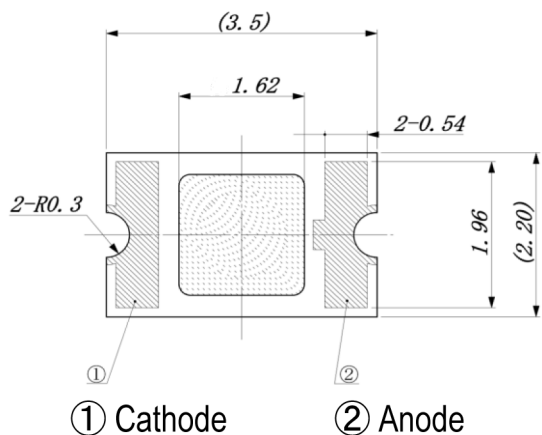
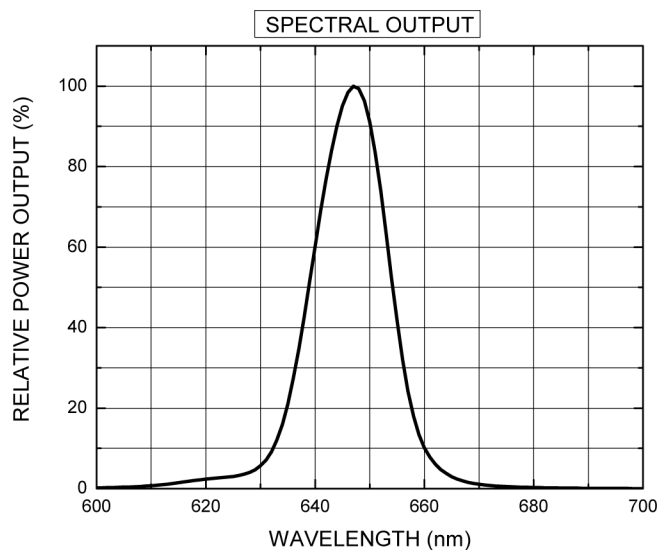
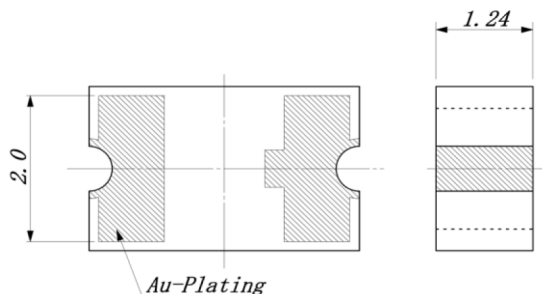


| ITEMS | SYMBOL | RATINGS | UNIT |
|------------------------------|--------|------------|------|
| Forward Current (DC) | IF | 50 | mA |
| Forward Current (Pulse)*1 | IFP | 0.3 | A |
| Reverse Voltage | VR | 5 | V |
| Power Dissipation | PD | 120 | mW |
| Operating Temperature Range | Topr | -20 ~ +80 | °C |
| Storage Temperature Range | Tstg | -30 ~ +100 | °C |
| Lead Soldering Temperature*2 | Tls | 260 | °C |

*1: Tw=10 μ sec, T=10msec. *2: Time 5 Sec max, Position: Up to 3mm from the body.

Electrical & Optical Characteristics (Ta = 25°C)

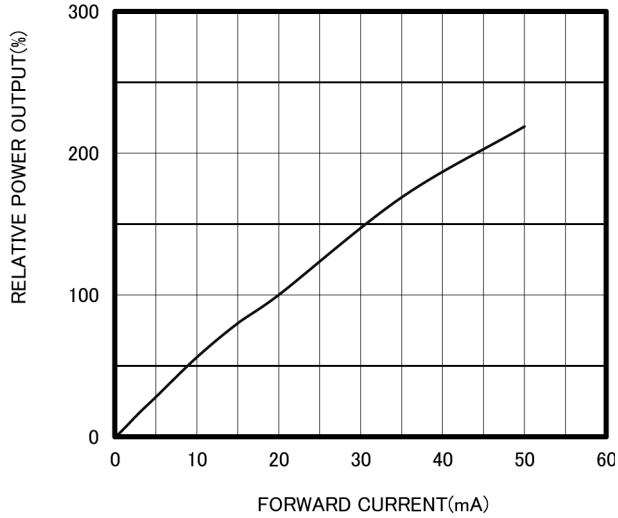
| ITEMS | SYMBOL | CONDITIONS | MIN | TYP | MAX | UNIT |
|---------------------------|-----------------|------------|-----|----------|-----|---------|
| Power Output | PO | IF=20mA | -- | 1.6 | -- | mW |
| Forward Voltage | VF | IF=20mA | -- | 1.9 | 2.4 | V |
| Reverse Current | IR | VR=5V | -- | -- | 100 | μ A |
| Peak Emission Wavelength | λ_p | IF=20mA | -- | 650 | -- | nm |
| Spectral Line Half Width | $\Delta\lambda$ | IF=20mA | -- | 15 | -- | nm |
| Half Intensity Beam Angle | Θ | IF=20mA | -- | ± 45 | -- | deg |



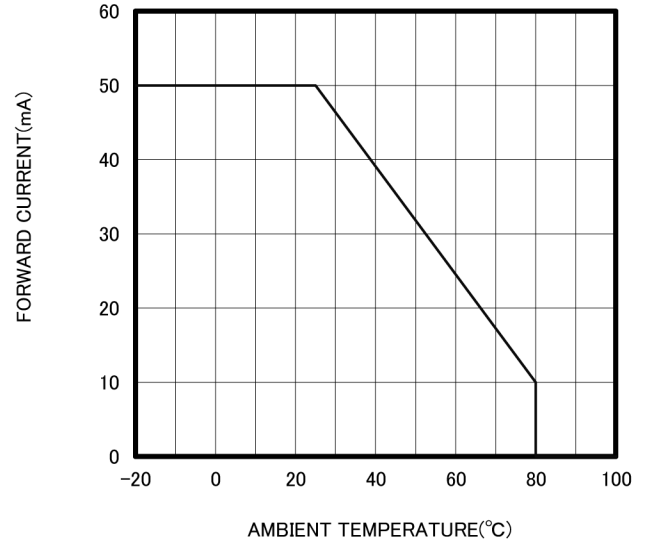
Unit: mm

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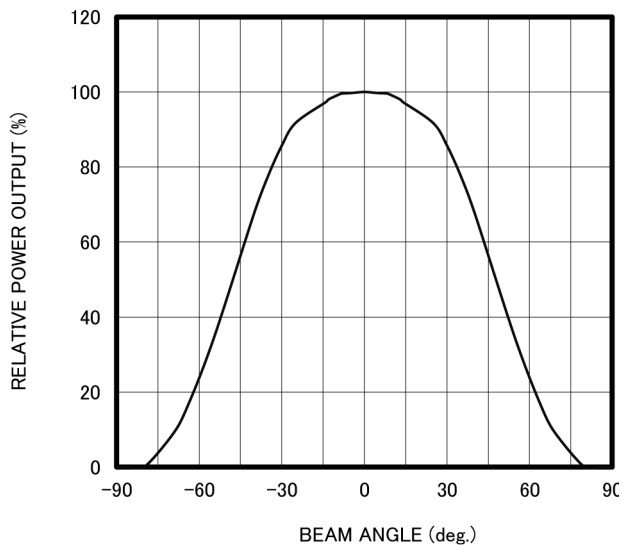
RELATIVE POWER vs FORWARD CURRENT



THERMAL DERATING CURVE



RADIATION PATTERN



The information contained herein is subject to change without notice.

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